

WHAT IS CLAIMED IS:

1. A data transmission system comprising:

at least one serving central office, wherein the serving central office includes a switching device;

at least one end user unit, wherein said end user unit includes a data communication device coupled to the switching device of the serving central office via a twisted pair line, and an internet appliance device that is coupled to the data communication device;

wherein multimedia data is transferred between the switching device of the serving central office and the data communication device of the end user unit, and between the data communication device of the end user unit and the internet appliance device of the end user unit using a common data transmission protocol.

2. A data transmission system as claimed in claim 1, further comprising at least one interoffice facility coupled to the serving central office via a first data transmission line, wherein the multimedia data is transferred between the interoffice facility and the serving central office over the first data transmission line using the common data transmission protocol.

3. A data transmission system as claimed in claim 2, further comprising at least one broadband service provider or internet service provider coupled to the interoffice facility via a second data transmission line, wherein the multimedia data is transferred

between the broadband service provider or internet service provider and the inter office facility over the second data transmission line using the common data transmission protocol.

4. A data transmission system as claimed in claim 3, wherein at least one of the first transmission line and the second transmission line comprise an optical fiber transmission line.

5. A data transmission system as claimed in claim 4, wherein at least one of the first transmission line and the second transmission line comprises a copper transmission line.

6. A data transmission system as claimed in claim 1, further comprising at least one interoffice facility coupled to the serving central office via a first data transmission line and at least one internet service provider coupled to the interoffice facility via a second data transmission line, wherein at least one of the first data transmission line and the second data transmission line comprise an optical fiber transmission line, and wherein the multimedia data is transmitted over the optical fiber transmission line utilizing an optical data transmission protocol that is different from the common data transmission protocol.

7. A data transmission system as claimed in claim 1, wherein the data transmission rate between the serving central office and the end user unit is at least 10 Mbps symmetrically on at a single twisted pair line.

8. A data transmission system as claimed in claim 1, wherein the maximum transmission distance from the central serving office to the end user unit is at least 8500 ft. These speeds can be maintained at up to 3 times the distances using line-powered repeaters.

9. A data transmission system as claimed in claim 1, wherein the common data transmission protocol is an asynchronous protocol.

10. A data transmission system as claimed in claim 1, wherein the switching device comprises a BSL switching device and the data communication device comprises a BSL data communication device.

11. A system comprising:  
a public switched telephone network including a serving central office;  
at least one end user unit coupled to the serving central office via a twisted pair line; and

data transfer means for transferring multimedia data between the serving central office of the public switched telephone network to the end user unit using a common data communication protocol.

12. A system as claimed in claim 11, wherein the end user unit includes an internet appliance device, wherein the data transfer means includes a switching device located in the serving central office and a data communication device located in the end user unit, and wherein the data communication device is coupled to the internet appliance and transfers the multimedia data between the internet appliance and the switching device using the common data transmission protocol.

13. A system as claimed in claim 11, wherein the public switched telephone network includes at least one inter office facility coupled to the serving central office via a communication line, and wherein the multimedia data is transferred between the inter office facility and the serving central office using the common data transmission protocol.

14. A system as claimed in claim 13, further comprising at least one internet service provider coupled to the inter office facility via a further communication line, and wherein the multimedia data is transferred between the internet service provider and the inter office facility using the common data transmission protocol.

15. A system as claimed in claim 14, wherein at least one of the communication line and the further communication line comprise an optical fiber communication line.

16. An apparatus as claimed in claim 14, wherein at least one of the communication line and the further communication line comprise a copper communication line.

17. An system as claimed in claim 11, wherein the data transmission protocol is an asynchronous data transmission protocol.

18. A method of transferring data comprising:  
generating data using an internet appliance at an end user unit;  
transferring the data from the internet appliance to a data communication device of the end user unit using a common data transmission protocol; and  
transferring the multimedia data from the data communication device of the end user unit to a serving central office of a public switched telephone network via a twisted pair line using the common data transmission protocol.

19. A method as claimed in claim 18, further comprising transferring the multimedia data from the serving central office to an inter office facility over a communication line using the common data transmission protocol.

20. A method as claimed in claim 19, further comprising transferring the multimedia data from the inter office facility over a further communication line to at least one internet service provider.